Joint MPH Program

University of Gondar and Addis Continental Institute of Public Health

Disclosure among Currently Partnered HIV positive individuals and its Reliability in Zewditu Hospital, Addis Ababa

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Abbreviations

ACIPH/UoG	Addis Continental Institute of Public Health/University of Gondar
ART	Anti-Retroviral Therapy
BSS	Behavioral Surveillance Survey
CDC	Centers for Disease Control and Prevention
CI	Confidence Interval
DHS	Demographic Health Survey
EDHS	Ethiopian Demographic Health Survey
EPHA	Ethiopia Public Health Association
HAART	Highly Active Anti Retroviral Therapy
HIV/AIDS	Human Immunodeficiency Virus/Acquired Immunodeficiency Syndrome
IDI	In-Depth Interview
KABP	Knowledge, Attitude, Behavior and Practice
MoH	Ministry of Health
OR	Odds Ratio
PLwHA/PLHIV	People Living with HIV/AIDS
SPSS	Statistical Package for Social Sciences
SP	Sexual Partner
TRA	Theory of Reasoned Action
VCT	Voluntary Counseling and Testing

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Abstract

Background: The single-point estimate for HIV prevalence in Ethiopia for adults 15-49 is 2.1%. In Ethiopia, there are more than 131,000 new HIV infections every year (2). No one-dimensional HIV/AIDS solution has ever become available. There is discrepancy between reported high rate of disclosure versus high rate of new HIV infections.

Objectives: The specific objectives were to assess disclosure among currently partnered HIV positive individuals and to assess reliability of disclosure.

Methods: This study utilized primarily cross sectional study with internal comparison. Qualitative research method, in-depth interview, was used to have further understanding of factors influencing HIV positive result disclosure. Sample size was 700 with 95% CI and 5% error plus power of 80%.

Findings: marital status (being married and widowed), monthly income, believe on the importance of disclosure and the perception that others disclose (reliability) among partnered HIV positive individuals were found to be significant predictors of disclosure.

Conclusion and Recommendations: 16% of HIV positive individuals don't disclose their result to their sexual partners. Self-report of HIV positive result disclosure among partnered individuals should be interpreted cautiously. The reliability is a big factor in disclosure. Couple counseling and testing and prevention with positives has to be implemented in larger scale. HIV/AIDS policies and strategies for sexual prevention need to focus and target PLHIV for disclosure as well.

1. Introduction

Over the past 25 years, HIV/AIDS has become part of the landscape of the contemporary world. Every country in the world now acknowledges and reports HIV infection in its population. Close to 60 million men, women, and children have been infected with HIV, and nearly 25 million people have died of AIDS. In 2007, about 33 million people were living with HIV/AIDS and 2·5 million people were newly infected. HIV/AIDS has become a leading cause of mortality worldwide and the main cause of death in sub-Saharan Africa (1).

The single-point estimate for HIV prevalence in Ethiopia for adults 15-49 is 2.1%. In addition to an urban geographic focus, population-based Demographic and Health Survey (DHS) data indicates that prevalence seems to be driven by risk behaviors among adults, especially those engaged in transactional sex and maintaining multiple, concurrent partnerships. HIV prevalence peaks among women aged 35-39 and men 40-44, suggesting a peak incidence of HIV infections among women in their late 20s and early 30s, and men in their mid-to-late 30s. In Ethiopia, there are more than 131,000 new HIV infections every year (2).

A high proportion of incident HIV infections in sub-Saharan Africa occur within married HIV-discordant couples, yet few interventions currently target couples. Prevalence of HIV discordance among married and cohabitating couples in Africa is high, ranging from 3-20% in the general population to 20-35% within couples in which one partner seeks HIV care services. HIV-negative members of discordant couples are at extremely high risk of HIV infection; their

annual incidence is between 10-20%, or between 10 and 100 fold higher than their counterparts in HIV concordant negative couples (3).

There are fairly high levels of sexual activity. Among HIV-positive patients on their first clinic visit in South Africa report that 80% of urban men, 74% of urban women, 61% of rural men and 47% of rural women were sexually active (3).

There had been a study conducted in Southern Western part of Ethiopia on disclosure status of HIV positive results (4), however, comparisons and analysis were not made to assess its reliability versus the high rate of disclosure.

Disclosing HIV test results to one's sexual partner allows the partner to engage in preventive behaviors as well as the access of necessary support for coping with sero status or illness. It may motivate partners to seek testing or change behavior, and ultimately decrease the transmission of HIV (4).

A qualitative assessment has indicated that discordant couples are at greater risk of HIV infection and surrounded with a lot of misconception. Negative partners are at high risk of HIV infection but few HIV/AIDS service providers have developed effective counseling messages for HIV-discordant couples (10).

2. Rationale of the Study

The rationale for conducting this study includes the following: Availability of couple HCT in Ethiopia is extremely low, High rate of sexual behavior among HIV positives-South Africa (80%), Disclosure encourages safer sexual behavior, High rate of disclosure and paradoxically high rate of new infections (Reliability), No comparison studies before and Zewditu Hospital covers 16% of the ART service in Addis Ababa.

3. Literature Review

Magnitude of Disclosure:

For people living with HIV/AIDS, sexual decisions are closely linked to knowledge of a sex partner's HIV status and disclosure of their own HIV status to sex partners (5).

Multiple behaviors collectively enhance risk, and they need to be targeted through many levels to achieve the best results. Behavioral strategy aims might involve a number of strategies that includes *disclosure of HIV serostatus* depending on the profile of the populations engaging in risky activities, among which HIV is spreading (6).

It is often the case that people who have HIV infection do not disclose their HIV status to their sex partners, for example, reported that 11% of HIV infected men do not disclose their HIV status to primary sex partners. In a study of mostly low-income Hispanic men, found that 52% had not disclosed their HIV serostatus to at least one of their sex partners. In a similar study, 24% of HIV seropositive women had not disclosed to sex partners and 13% had not disclosed being HIV infected to anyone. Effective HIV disclosure decision-making is therefore a difficult challenge facing most people living with HIVAIDS, particularly within the context of their sexual relationships (7).

A total of 705 people (353 women and 352 men), participated in a cross-sectional study, conducted in Jimma University specialized Hospital from January 15, 2007 to March 15, 2007, of which 71.6% were taking ART. The vast majority (94.5%) disclosed their result to at least one

person and 90.8% disclosed to their current main partner. However, 14.2% of disclosure was delayed and 20.6% did not know their partner's HIV status. Disclosure of HIV results to a sexual partner was associated with knowing the partner's HIV status, advanced disease stage, low negative self-image, residing in the same house with partner, and discussion about HIV testing prior to seeking services (4).

Perceived benefit:

The perceived advantages are easier access, reduced stigma, and the possibility that counseling and disclosure for couples might be eased, especially in sero-discordant couples. Assistance with disclosure and partner testing, or the advancement of counseling and testing for couples, can help to identify partners who are infected and in need of treatment, or who are not infected and in need of protection (1).

Sixty-five participants were recruited from five AIDS/HIV centers in Israeli hospitals, depression and shame affected the intention to disclose the secret. Disclosure was associated with being male, having a high level of depression and shame, and having a low level of education. Participants with high levels of guilt who stated that they intended to disclose the secret were most likely to have done so (8).

Barriers for disclosure

Decisions to disclose HIV status depend on several factors, including how long the person has been HIV-positive, access to social and emotional resources and the nature of the relationship between the person with HIV/AIDS and the person being disclosed to (9).

The availability of couple HIV counseling in the country is extremely limited. Hand-in-hand with the development of couple counseling should be increased efforts to reduce stigma and encourage disclosure (11).

Implication:

The availability of couple HIV counseling in Ethiopia is extremely limited. Hand-in-hand with the development of couple counseling should be increased efforts to reduce stigma and encourage disclosure. (12).

The majority of the remaining couples (1.8 percent out of a total of 2.1 percent) are discordant, that is, one partner is infected and the other is not. There is clearly an unmet need for VCT services oriented towards couples, because most of these couples do not mutually know their HIV status. (13)

4. Objectives

General Objectives

To assess HIV Positive Result Disclosure to sexual partner in Addis Ababa

Specific Objectives

- To assess disclosure and its determinants among currently partnered HIV positive pre-ART and ART individuals
- To assess reliability of disclosure Versus the level of disclosure among currently partnered pre-ART and ART individuals

5. Methods

5.1 Study Area: Addis Ababa

Addis Ababa has a total population of 2, 738,248. In 2009, the total HIV positive population is estimated to be 190,485. ART service is being provided in 36 public facilities. 33, 363 patients are currently on ART in Addis Ababa (Yekatit 2001 E.C.). 5527 PLHIV Currently on ART in Zewditu Hospital

5.2 Study Design

This study utilized primarily cross-sectional study with internal comparison and Qualitative research method, in-depth interview.

5.3. Source Population:

PLHIV in Addis Ababa

5.4 Study Population: Partnered PLHIV who are on pre-ART or ART at Zewditu Hospital

Inclusion Criteria

HIV+ individuals attending ART and pre-ART service at Zewditu Hospital were eligible to participate in the study groups.

Exclusion Criteria

Patients who are either seriously or acutely sick were also excluded from the study.

5.5 Sampling and Sample Size

Sampling for the Quantitative:

The primary exposure used to assess disclosure was having current partner defined as being married or had sex in the last one year ("Partnered"). It was estimated that 80% of the participants had partnered.

The sampling followed simple random sampling among those who had an appointment on the data collection days over one month period of time. Those patients who came at Zewditu Hospital for their ART or pre-ART follow up through May 2009. Participants were identified, and then as they finish with their ART or pre-ART service or before their turn, they were checked whether or not they are among the study participants and interviewed.

Sample Size

Sample size was calculated using Epinfo version 6. A total of 700 samples were decided with 80% power out of the 5527 patients. 10% non-response rate was included in the sample.

The sample size was based on providing a 95% confidence interval for the true prevalence of the characteristics of interest with margin of error of 5%.

Sampling for the Qualitative Part:

Sampling was purposive. In-depth interview employed for those individuals who are partnered and didn't yet disclose their HIV status. The purpose of this part was to identify factors related with disclosure to sexual partner and understand its reliability. The in-depth interview continued until the information generated saturated.

5.6 Data Collection tool and procedures:

Respondents who agree to participate through their verbal consent were enrolled and interviewed for the study. Both males and females following ART and pre-ART services at Zewditu Hospital included.

After the participants verbally agreed, the semi-structured interviews were administered orally. The semi-structured interview last approximately 45 minutes and IDIs last maximum of 30 minutes. For those who are currently partnered and didn't disclose their HIV positive result to their sexual partners interviewed for a total of 1 hour and 15 minutes for both the SSI and in-depth interview.

Case managers at Zewditu Hospital and Nurse Counselors were used as data collectors. Prior to the data collection, the data collectors and supervisors trained for two days. The purpose of the training was to let them understand the objective of the study and get familiarized, clear and understand all the questions and process at the same level. The training was useful for editing and further revision. The training was conducted by the lead researcher.

The quantitative part employed a semi-structured interview tool which was adapted from standard questions of Demographic and Health Survey and a study designed to assess sexual behavior of PLHIV while the in-depth interview used discussion guide that is primarily based constructs of health belief model and theory of reasoned action. The guide for the in-depth interview had open ended questions.

Both tools were pre-tested prior to the actual interviews. Revision of the questions was made based on the experience of the in-depth interview.

The actual interviews were made at Zewditu Hospital ART clinic and Zewditu Model VCT Center which was also very close to the ART clinic. The interviews happened at a room which was quiet and private to make the respondents comfortable.

Timing for data collection

The data was collected over a period of one month in May 2009. Both the qualitative and quantitative part collected simultaneously to triangulate the findings using the open ended in-depth interview guides.

Data Management:

Quantitative: After the data collection is done, each data was coded, entered in to Epi, cleaned, stored and recorded.

Qualitative: The in-depth interviews did not use tape recording; rather note taking of responses was emphasized. The in-depth interviews was transcribed and categorized by thematic area.

5. 7 Data Quality

All data collected were reviewed by supervisors to ensure quality and completeness. Feedback was given to data collectors for improvement or motivation.

The study tools were Pre-tested before the actual data collection on the same Hospital that the study conducted during the training to make sure the questions are fit to bring the intended responses and interpreted in similar ways. In addition, the data collectors were trained to have similar responses among themselves based on the questions. This minimizes interviewer's bias.

For those who are partnered and didn't disclose their HIV positive result to their sexual partners undergone qualitative in-depth interviews which helped the study to explain the information generated in the Quantitative part particularly determinants of disclosure. This helps better understand and get the feeling about disclosure.

Because of the fact that most PLHIV report that they have disclosed to their sexual partners, adequate data was chosen so that there would be adequate cases of non-disclosure for better comparison.

Supervisors were hired for any assistance and support the data collectors. On-site supervision was also made in between the data collection. This was very helpful to avoid recall bias on the process of data collection and completeness of data generated. The semi-structured questionnaires were all reviewed for completeness so that variables will not be missing.

Data cleaning was also done to regain what was missed during the data entry. Frequency for each variable was made to identify missing ones.

5.8 Variables of the study:

Dependent variable: Disclosure of HIV positive result disclosure to sexual partner

Explanatory Variables: Age, sex, marital status, monthly income, religion, believes on disclosure, perception about others disclosure.

5.9 Data analysis:

The data entered using Epi was cleaned and then exported to SPSS; analysis was made using SPSS. The dependent variable was “disclosure to sexual partner among those who are partnered”. This variable was created through computing those who were married or had sex in the last 1 year. Sex in the last 1 year (Vs last 6 months) was selected to have more samples for comparison. As the dependent variable was categorical (Disclosure or Non-disclosure to Sexual Partner), Logistic regression and crude and adjusted Odds Ratio were used.

A multi-variate analysis was done using logistic regression model that reported the Hosmer-Lemeshow Goodness-of-Fit statistic. The Hosmer-Lemeshow Goodness-of-Fit statistic helped to determine whether the model adequately describes the data. Hosmer-Lemeshow Goodness-of-Fit statistic for this data analysis which was Forward Stepwise method indicated p=.892 which is greater than .05 implying the model adequately fits the data. The process also went through the most reliable test of model fit for SPSS binary regression because it aggregates the observation into groups of “similar” cases; that is when the variable about “others disclosure” was aggregated with “belief on disclosure” though it was entered as one of the variables. The statistics was then computed based on theses groups.

Reliability of disclosure to sexual partner was assesses based on believe and perception on disclosure to sexual partner.

5.10 Operational Definitions

Disclosure: self report by a PLHIV for informing the sexual partner or for whom the individual had sex in the last one year. Disclosure was the dependent variable.

Reliability of Disclosure: This was measured based on two variables. One was perception about other's disclosure, i.e. did the respondent perceive that other HIV positive individuals disclose their result to their sexual partners? The second was the belief of the respondent (strong agreement) towards the importance of disclosure to sexual partner.

5.11 Ethical Considerations

Verbal Consent was asked for all respondents before each interview. The consent was translated to Amharic and read for all participants. The content of the interview includes who the interviewer is, the objective of the study, the right to participate for the study or withdraw at any point in time, the right not to respond to any of the questions that they are not comfortable, the confidentiality of the responses and the fact that the report will not have any of individual identifiers.

Names and other identifiable information on participants were not collected. After completion, the interviewers placed consent forms, questionnaires and other study documents in a locked case. The interviewer kept this locked case with him/her at all times. Computers used to enter study data were password-protected. Digital recordings and transcripts of in-depth interviews were also stored in locked cabinets and password-protected with the study team.

IRB was secured from Gondar University and EPHA before the data collection was initiated. Support letter from Addis Ababa Regional Health Bureau was also secured.

6. Results

I. Socio-Demographic Characteristics

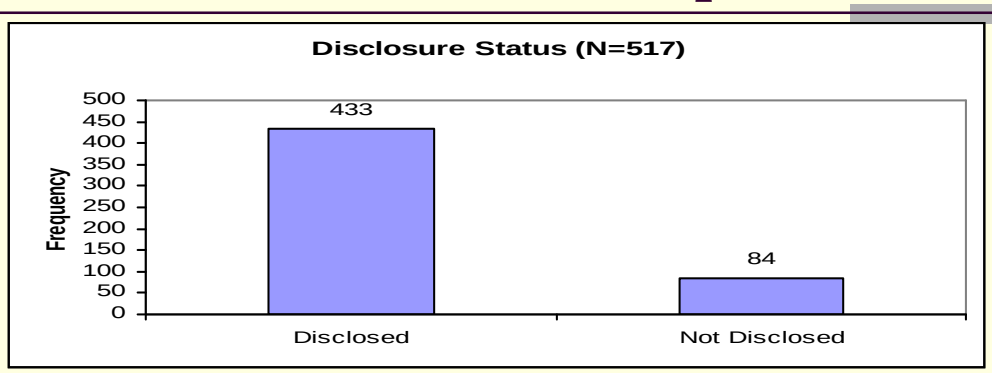
Table 1 presents socio-demographic characteristics of the 517 respondents who are HIV positive and attending ART or pre-ART follow up in Zewditu Hospital, Addis Ababa.

The respondents are predominantly in the age range of 30-39 (53.2%), married (42.6%) and employed (62.8%). Most of the respondents are educated (67.6% grade 9 and above). The respondents were dominantly orthodox Christians (78%). The mean age for the respondents is 35 the range being 17 to 65. Most of PLHIV enrolled in the study were sexually active (68.4).

Table 1 Characteristics of PLHIV respondents (N=517), Zewditu Hospital, Addis Ababa, 2009

Characteristics	Frequency	%
Age		
15-29	119	23.0
30-39	275	53.2
40-65	123	23.8
Sex		
Male	202	39.1
Female	315	60.9
Marital Status		
Single	153	21.9
Married	298	42.6
Divorced/Separated	106	15.1
Widowed	143	20.4
Educational Level (N=690)		
Below Grade 8	167	32.5
Grade 9-10	115	22.4
Grade 11-12	134	26.1
12+	98	19.1
Occupation (N=693)		
Employed	321	62.8
Not Employed	190	37.2
Monthly Income		
0-500	308	59.6
501-1000	146	28.2
1001-2500	47	9.1
2501-5000	16	3.1
Religion		
Orthodox and other Christians	404	78.3
Protestant	85	16.5
Muslim and Others	27	5.2
Total	517	100

Fig. 1. **Disclosure Status Among Partnered, Zewditu Hospital, 2009**



•Among partnered (N=517), 433 (83.8%) disclosed to their sexual partner

II. Association between Socio-demographic Variables and Disclosure to Sexual Partner

Among partnered (N=517), 433 (83.8%) disclosed to their sexual partner; 84 (16.2%) of the partnered didn't disclose (Table 2). 273 (91.8%) of married, 55 (64%) of singles, 44 (75.9%) of the divorced and 61 (81.3%) of widowed have disclosed to their sexual partners. this was found to be statistically significant $X^2_{(3)}$ 41.27; p=0.000.

In the univariate analysis, it has been noted the odds of disclosure among married are 6 times higher than the single ones with 95% of confidence interval (3.42, 12.00) which is statistically significant. The odds of disclosure among widowed is also 2.5 times higher than the singles; 95% CI (1.18, 5.09).

The odds of disclosure in those who earn relatively modest (501-1000) were 2 times higher as compared to those who earn 500 Birr and less. This was not found to be statistically significant 95% CI (0.98, 3.14).

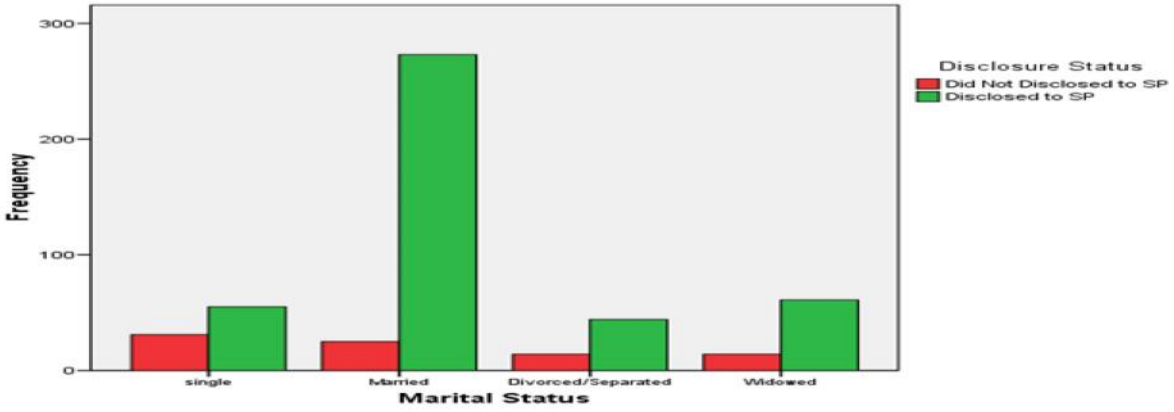
Table 2 Disclosure to Sexual Partner by Socio-Demographic Variables, (N=517), Zewditu Hospital, 2009

Characteristics	Sample	Disclosed		Crude	
		Yes	No	OR	95% CI
Age					
15-29 (ref.)	119	99	20	1.00	
30-39	275	228	47	0.98	(0.55, 1.74)
40-65	123	106	17	1.26	(0.62, 2.54)
Sex					
Male (ref.)	202	171	31	1.00	
Female	315	262	53	0.89	(0.55, 1.45)
Marital Status					
Single (ref.)	86	55	31	1.00	
Married	298	273	21	6.41	(3.42, 12.00)
Divorced/Separated	58	44	14	1.77	(0.84, 3.73)
Widowed	75	61	14	2.45	(1.18, 5.09)
Educational Level (N= 514)					
Below Grade8(ref.)	167	142	25	1.00	
Grade 9-10	115	97	18	0.95	(0.48, 1.88)
Grade 11-12	134	114	20	1.00	(0.53, 1.89)
12+	98	78	20	0.68	(0.35, 1.32)
Occupation (N=511)					
Not Employed (ref)	190	156	34	1.00	
Employed	321	273	48	1.24	(0.76, 2.00)
Monthly Income					
0-500 (ref.)	308	250	58	1.00	
501-1000	146	129	17	1.76	(0.98, 3.14)
1001-2500	47	43	4	2.49	(0.86, 7.22)
2501-5000	16	11	5	0.51	(0.17, 1.52)
Religion (N= 516)					
Orthodox and other Christians	404	338	66	1.16	(0.42, 3.18)
Protestants	85	73	12	1.38	(0.43, 4.35)
Others* (ref.)	27	22	5	1.00	

*Others includes Muslims

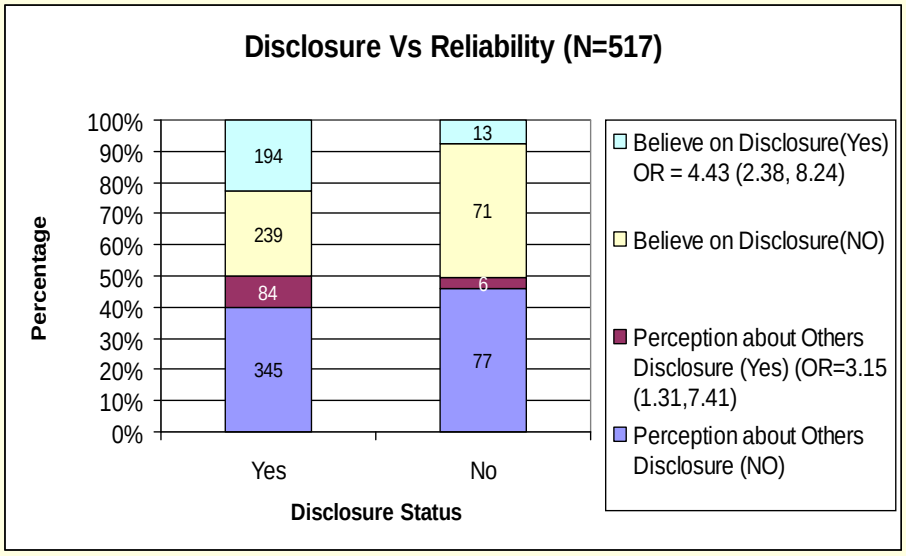
Fig. 2. Determinants of Disclosure

Disclosure Among Partnered by Marital Status, Zewditu Hospital, Addis Ababa, 2009



- 91.8% of married, 64% of singles, 75.9% of the divorced and 81.3% of widowed have disclosed
- This was found to be statistically significant X2 (3) 41.27; p=0.000

Fig. 3. Disclosure Vs Believe and Perception about others' Disclosure, Zewditu Hospital, Addis Ababa, 2009



III. Reliability of Disclosure

Perception of respondents about others' disclosure and believe on disclosure to sexual partner was found to have statistically significant association. Table 3 shows that the odds of disclosure to sexual partner among those HIV positives and partnered who perceive that others' who are HIV positive disclose to their sexual partners "always" is 3 times higher compared with those who don't perceive at this level, 95% CI (1.31, 7.41).

In addition, the odds of disclosure for those who "strongly believe" for disclosure of HIV positive status to sexual partner is 4.4 times higher, 95% CI (2.38, 8.24).

345 (82%) of those who are partnered and report that they have disclosed to their sexual partners don't perceive that others always disclose to their sexual partners. This difference is statistically significant with $X^2_{(1)}$ 7.32; p=0.007.

239 (77.1%) of those who disclosed to sexual partner, don't strongly believe on disclosure to sexual partner. This was also statistically significant with $X^2_{(1)}$ 25.2; p=0.000.

Table 3 Reliability of Disclosure, (N=517), Zewditu Hospital, 2009

Characteristics	Sample	Disclosed		Crude	
		Yes	No	OR	95% CI
Perception about Others Disclosure (N=512)					
No (ref)	422	345 (82%)	77 (18%)	1.00	
Yes (Always)	90	84 (93.3%)	6 (6.7%)	3.15	(1.31, 7.41)
Believe on Disclosure					
Non-strong agree	310	239 (77.1%)	71(22.9%)	1	
Strongly Agree	207	194 (93.7%)	13 (6.3%)	4.43	(2.38, 8.24)

IV. Multi-Variate Analysis of Socio-demographic characteristics and Disclosure Among partnered HIV Positive individuals and its Reliability

A multi-variate analysis was done using logistic regression model that reported the Hosmer-Lemeshow Goodness-of-Fit statistic. The Hosmer-Lemeshow Goodness-of-Fit statistic helped to determine whether the model adequately describes the data. Hosmer-Lemeshow Goodness-of-Fit statistic for this data analysis which was Forward Stepwise method indicated p=.892 which is greater than .05 implying the model adequately fits the data. The process also went through the most reliable test of model fit for SPSS binary regression because it aggregates the observation into groups of "similar" cases; that is when the variable about "others disclosure" was aggregated with "belief on disclosure" though it was entered as one of the variables. The statistics was then computed based on theses groups.

From the above process as it can be seen on the table below (Table 4), Being married, widowed, modest monthly income (501-1000 Birr), belief on disclosure of HIV positive status persisted to be predictors of Disclosure to sexual partner among partnered HIV positive individuals.

We can also see in the table below (Table 4) generated from the multi-variate analysis, the Odds of disclosure among partnered married and widowed is 5 and 2.5 times more than the singles respectively (95% CI (2.79, 10.1) and (1.20, 5.47) respectively). The odds of those individuals whose monthly income is between (501-1000) are 2 times higher than those who earn 500 and less with 95% CI (1.14, 3.96). The adjusted OR is less as respondents earn more and more. The

odds of disclosure among those who earn modest between 501-1000 were 2 times higher as compared to those who earn less than 500 with 95% CI (1.14, 3.96).

The reliability of disclosure is still significant for the multi-variant analysis. The AOR for those who believe strongly is 3.5 with 95% CI (1.80, 6.62).

As a further check, the model was checked using backward stepwise method. Backward stepwise method was started with a model that included all of the predictors identified. At each step, the predictor that contributes the least was removed from the model, until all of the predictors in the model are significant.

The two methods (forward stepwise and backward stepwise) choose the same variables as predictors of disclosure i.e. marital status, monthly income, and believes on disclosure; which imply that we are fairly confident that it's a good model.

Table 4: Adjusted OR for Socio-demographic Variables (N=517), Zewditu Hospital, 2009

Variables	Crude		Adjusted	
	OR	95% CI	OR	95% CI
Marital Status				
Single (ref.)	1.00			
Married	6.41	(3.42, 12.0)	5.30	(2.79, 10.1)
Divorced/Separated	1.77	(0.84, 3.73)	1.51	(0.69, 3.29)
Widowed	2.45	(1.18, 5.09)	2.57	(1.20, 5.47)
Monthly Income				
0-500	1.00			
501-1000	1.76	(0.98, 3.14)	2.13	(1.14, 3.96)
1001-2500	2.49	(0.86, 7.22)	1.99	(0.65, 6.04)
2501-5000	0.51	(0.17, 1.52)	0.43	(0.13, 1.47)
Believe on Disclosure to SP				
No	1.00			
Yes (Strongly Believe)	4.43	(2.38, 8.24)	3.46	(1.80, 6.62)

V. Analysis of the Qualitative Data

In-depth interview conducted for those who didn't disclose to their HIV positive result to their sexual partners came up with the following factors for disclosure.

Cognitive: Good People, Positive thinkers, Faithful/honest/genuine, Open minded, Self confident, Fear God, Those who go to "Save others"

Socio-economic factors: Educated people, In need of others support; economic or social, Someone understanding

Marital Status and Gender: Being Married, Have children, Being Female ("Females are transparent"), Service Provision, Couple counseling, Being on ART

Case Study 1: A persons who don't disclose his HIV status to sexual partner in the last 1 year

Disclosure of HIV result to others will let you protect your sexual partner. For example I am HIV positive and my wife is HIV negative. I should protect her. I have occasional sexual relationships with other women.

Disclosing to someone is important. I don't feel comfortable disclosing for someone who is on occasional relationship but disclosure for someone who is close to you is important. My brother is educated and I told him that I am HIV Positive. He understands me very well and he is good to me. No one knows in the house neither of my current sexual partner. Actually, I quieted having sex now few months ago.

Case study 2: Stigma and Discrimination

I am a secretary. My husband died. I checked then my status and found to be HIV+. After some years, I wanted to have a child. Then I became to know someone who doesn't know his status. My interest to have a child was a barrier to disclose my status. I didn't inform him that I was HIV + then we had unprotected sex and we got a child. We are not now together but we sometimes see each other.

The knowledge and attitude among the society is bad. They do not understand the disease as a simple illness. Rather, they see it as a devil and they see positive people very negatively. It doesn't encourage you to disclose it. I never had a plan to disclose for a wider group of people. I weigh the advantages and disadvantages. Especially, disclosing to your surrounding is tough. You might end up in loosing your job.

I don't mind disclosing my HIV positive result to anyone; however, the problem comes for the children. I am widow. If someone including my sexual partner comes to know I am positive, the secret might be disseminated and my children will fall in a problem.

People in our community gossip even before the condition are known. My husband was sick; my community members were gossiping about his sickness. They were saying he died of HIV.

These two case studies inform us that the issue of HIV positive result disclosure is complex and there are diverse reasons for disclosure of HIV positive result disclosure.

Perceived Factors Contributing to Disclosure and Intention to Disclose

Using the constructs of Health Belief Model and Theory of reasoned action, those partnered respondents who didn't disclose their HIV positive-status to their sexual partner were interviewed.

Accordingly the following were summarized thematically.

Benefits of Disclosure

Most of the respondents feel that Disclosure helps to support each other, for safer sexual behavior and positive living. "By disclosure, you get relieved. Your mind is free of criticism." Majority of the respondents said that the key benefit of disclosure is "saving others". Some respondents said that disclosure helps to have safer sexual practice so that you don't exchange different kind of strains to your partner which will devastate your situation. The most common theme mentioned by the respondents was "you sacrifices to save others". Few mentioned positive living. Those who were found to be sero-discordant mentioned that disclosure is key in terms of saving the life of the other, in terms of taking precaution.

Motivation to Disclose

The most common motivating factors mentioned by the research participants were the following:

- If an individual is educated and close
- The counseling from health providers is also a motivating factor
- Saving others
- If a person is too close
- When people are married
- “If a close family member is besides you to help, tell him.”

“Those who convinced themselves, responsible for others, confident about themselves, not dependent on others and those who are aware of HIV/AIDS disclose their HIV positive result to their sexual partners and their family members”, said an adherence supporter at Zewditu Hospital.

Barriers of Disclosure

Stigma and Discrimination:

During the interview process people were reluctant to disclose to their sexual partner and other people mostly because of the stigma and discrimination.

“The attitude of the people for HIV+ individuals is not ok. They point at you and very difficult to share my result with them. Those who disclose are those who have their own house. Some house owners fire you if they know you are HIV+”

7. Discussion

Eighty participants (11.4%) refused to participate in the study. The respondents were predominantly in the age range of 30-39 (53.2%), married (42.6%) and employed (62.8%). Most of the respondents are educated (67.6% grade 9 and above). The respondents were also dominantly orthodox Christians (78%).

Of those who were partnered (N=517), 433 (83.8%) disclosed to their sexual partner; 84 (16.2%) of the partnered didn't disclose. Such higher rates of disclosure were also reported in other studies as indicted below.

In a study of mostly low-income Hispanic men, found that 52% had not disclosed their HIV serostatus to at least one of their sex partners. In a similar study, 24% of HIV seropositive women had not disclosed to sex partners and 13% had not disclosed being HIV infected to anyone. 11% of HIV infected men do not disclose their HIV status to primary sex partners. (7). In a cross-sectional study, conducted in Jimma University specialized Hospital, the vast majority (94.5%) disclosed their result to at least one person and 90.8% disclosed to their current main partner (4). The majority of the remaining couples (1.8 percent out of a total of 2.1 percent) are discordant, that is, one partner is infected and the other is not. There is clearly an unmet need for VCT services oriented towards couples, because most of these couples do not mutually know their HIV status (13).

This high rate of disclosure may be affected by the social desirability a participant encounters in the study. The data collectors were decided to be those counselors and case managers from the hospital they are having their follow up. They think that they are expected to behave healthily. This has a likelihood of underreporting of nondisclosure.

The qualitative assessment complemented the study to further understand factors related with disclosure. Questions targeted towards the reliability of the information they give about disclosure was also an important method to triangulate their response. Pre-testing and revision of the study tool also helped to fairly ask respondents about the various variables.

Marital status, monthly income and believe on disclosure persisted to be significant predictors of disclosure among the currently partnered individuals. This tells us that being in marriage has a higher likelihood of disclosure because of the intimacy and interest to plan ahead for the family. The process of accessing treatment also requires them to bring their family members. The widowed might also get suspect from others and they are likely to be open to tell for their current partner.

Significant portion of those who reported disclosed are found to have a non-reliable attitude towards their disclosure. 345 (82%) and 239 (77.1%) of those who disclosed to sexual partner, “don’t perceive that others always disclose” and “don’t believe strongly on disclosure” respectively; this was statistically significant $p<0.05$ in both cases. The AOR for those who believe strongly is 3.5 with 95% CI (1.80, 6.62); which means that the odds of disclosure for

those who believe strongly about the importance of disclosure was 3.5 times higher which is statistically significant

These predictors of disclosure were a bit different from what was mentioned in other studies. Disclosure was associated with being male, having a high level of depression and shame, and having a low level of education. Participants with high levels of guilt who stated that they intended to disclose the secret were most likely to have done so (8). Disclosure of HIV results to a sexual partner was associated with knowing the partner's HIV status, advanced disease stage, low negative self-image, residing in the same house with partner, and discussion about HIV testing prior to seeking services.

Assistance with disclosure and partner testing, or the advancement of counseling and testing for couples, can help to identify partners who are infected and in need of treatment, or who are not infected and in need of protection (1).

From the in-depth interview it was noted that Stigma and Discrimination was the key barrier for disclosure of positive serostatus for sexual partner. Some participants also mentioned that it is those people who are open and go for saving others are disclosing.

Participants recognized that stigma was keeping people away from disclosure and, as a result, contributing to the spread of the disease (13). Stigma and discrimination was the most common barrier mentioned by study participants. People are afraid to inform their sexual partners fearing that they will inform others and the secrecy breaks after which others will point at the PLHIV.

8. Conclusion

Majority 433 (83.8%) out of 517 currently partnered participants disclosed to their sexual partner; 84 (16.2%) of the partnered didn't disclose. The reliability of disclosure is questionable; 345 (82%) of those who are partnered and report that they have disclosed to their sexual partners "don't perceive that others disclose" to their sexual partners. This difference is statistically significant with $X^2_{(1)}$ 7.32; p=0.007. In addition, 239 (77.1%) of those who disclosed to sexual partner, "don't believe strongly on disclosure" to a sexual partner; this was also statistically significant with $X^2_{(1)}$ 25.2; p=0.000. Therefore, high rates of disclosure to sexual partner have to be cautiously interpreted.

Marital status (being married or widowed), monthly income between 501-1000, perception about others disclosure status and strong believe on importance of disclosure were found to be predictors of HIV positive result disclosure to sexual partner among partnered HIV positive individuals. These were all statistically significant. This has been consistent in both the univariate and multi-variate analysis.

Factors of disclosure mentioned by majority of the respondents lie under the constructs of health belief model and theory of reasoned action. Perceived factors, perceived threats, benefits and barriers of disclosure were the major findings in which motivation for disclosure were facilitating the process for disclosure of HIV positive result to sexual partner. Factors mentioned by participants as determinants of disclosure were categorized as Cognitive, Socio-economic factors, Marital Status, Gender and Provision of Services.

Most of PLHIV enrolled in the study were sexually active (68.4). Limited research in developing countries has shown that HIV-patients report fairly high levels of sexual activity. Among HIV-positive patients on their first clinic visit in South Africa, report that 80% of urban men, 74% of urban women, 61% of rural men and 47% of rural women were sexually active. (3)

9. Recommendation

Disclosing HIV test results to one's sexual partner allows the partner to engage in preventive behaviors as well as the access of necessary support for coping with sero status or illness. It may motivate partners to seek testing or change behavior, and ultimately decrease the transmission of HIV.

Policy Level

The draft and revised HIV/AIDS policy needs to clearly specify encouragement for disclosure and expanded services for couple counseling and testing as a key strategy to avert new HIV infections in Ethiopia. The Epidemiologic Synthesis report developed by MoH and World Bank has also clearly indicated the availability of couple HIV counseling in the country to be extremely limited.

Program Level

Considering the fact that most of the PLHIV are sexually active, there has to be a strong sexual prevention of HIV transmission that includes disclosure as an issue. Sexual behavior of PLHIV has to be a factor to be monitored in each follow up of the patients than is an issue only during ART initiation.

Need for Targeted Intervention: PLHIV should be segmented and approached to discuss their sexual behavior and provide sexual prevention services based on their socio-demographic characteristics, perception and attitude. Though disclosure seems to have a higher rate among currently partnered HIV positive individuals, the reliability is not fully there. Even the 16.2% of non-disclosure among partnered HIV positive individuals must not be tolerable; because it is a source of new HIV infection.

Prevention with positives: is a standardized approach for HIV prevention among the HIV positive population. Disclosure is a component in prevention with positives. This has to be scaled up and implemented in Ethiopia.

Key messaging linked with the services: The case manager's role in care and treatment facilities has to be revisited and should be clear. They need to counsel, educate and promote disclosure and safer sexual practices.

Community Level: Community level interventions to promote and empower disclosure should be implemented. Efforts to address stigma and discrimination have to be strengthened. It was observed that patient educational materials are lacking; simple fliers, user friendly summarizing key messages can be provided; most of the ART service beneficiaries seem educated.

Research

More rigorous study using standardized models has to be done to further research the sexual behavior associated with disclosure.

The proposed study has to go deep further to understand the current dynamics of HIV transmission from the Most at Risk Population including PLHIV and their sexual network.

Social-desirability bias is a key factor in such studies. Upcoming studies have to be in a position to combat this limitation.

The respondents were more Christian, and majority Educated. Future researches have to fill the gap through having more representation of these groups.

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11. Annexes

Annex 1. English Consent Forms

English: Informed Consent Forms for Qualitative and Quantitative Part

1. Purpose

Little is known about risk behaviors of HIV-positive individuals in Ethiopia for transmitting HIV. This study will be dealing on both HIV+ result disclosure status and intention to disclose.

2. Procedures

The purpose of my interview is to ask you some questions related to your background, HIV status, sexual behavior and result disclosure. Our interview will be guided by a semi-structured questionnaire which will help us use our time efficiently.

3. Risks of Participation

There is no anticipated risk involved with this interview. Some questions may make you feel uneasy. You may be embarrassed telling us your thoughts. You don't have to answer any question(s), if you don't want to.

4. Benefits of Participation

You will help us understand the HIV situation and improve a program that may prevent the spread of HIV. We hope that PLwHA, their families and the community at large will benefit from the program.

5. Compensation

You will not receive monetary compensation for this interview.

6. Privacy

What we talk about will be kept private. Your name will not be attached to any written notes from this interview. All written materials will be locked in a cabinet. Only key project staff will see this information during the project. All written material will be destroyed after the project is done. Your name or other facts that might point to you will not appear when we present information from this project or publish its results.

We may use words from your interview in a report. However, you can be sure that your name or any other identifying information will not be used. There will be no way to identify you from the tapes of the interview.

7. Voluntary Participation, Refusal and Withdrawal

This interview is completely voluntary. You can discuss as much as you like or as little as you like. You do not have to answer any questions that you do not feel comfortable with. You can stop the interview at anytime without giving reason. Your relationship with the NDFE will not be affected in any way. You can still receive services and take part in other programs.

8. Persons to Contact

Contact myself (Dr Endale Workalemahu) at 0911-235906 if you have any questions about the project or your participation.

Your signature or verbal agreement on this form means that you have been informed about this study's purpose, procedures, possible benefits and risks.

_____ _____

Print name of data Collector Obtaining Consent Date

Annex 2. Amharic: Informed Consent Forms for Qualitative and Quantitative Part

የፈቃደኝነት ማረጋገጫ ቅፅ

የዚህ ጥናት አላማ ኤች አይ ቪ ፖዝቲቭ የሆኑ ሰዎች ውጤታቸውን ለሌሎ ስለመግለፃቸው ለማወቅ ካላሣወቁም የማሣወቅ ፍላጎት እንዳለቸው ወይም እንደሌላቸው ለመረዳት ነው። ስለዚህ በዚህ መጠይቅ ውስጥ ስለራስዎ፣ ስለኤች አይ ቪ ሁኔታዎ፣ ስለ ግብረ ስጋ ግንኙነት ባህሪዎ እንዲሁም ውጤትን ስለማሣወቅ አንዳንድ ጥያቄዎች እጠይቅዎታለሁ።

ይኼንን መጠይቅ ስለመለሱልኝ ምንም የሚያጋጥምዎት ችግር አይኖርም። ለመመለስ የማይፈልጓቸው ጥያቄዎች ካሉ አለመመለስም ሆነ መጠይቁን መሙላት በፈለጉ ሠዓት ማቋረጥ ይችላሉ። በዚህ መጠይቅ በመተባበርዎ የኤች አይ ቪ/ኤድስን ስርጭት ለማቆም በሚደረገው እንቅስቃሴ ከፍተኛ አስተዋፅኦ ያበረክታሉ።

እዚህ መጠይቅ ውስጥ የተሞሉት በሙሉ ሚስጥራዊ ናቸው ስለሆነም ይህ መጠይቅ ጥናቱ እስኪያልቅ ድረስ ሚስጥሩ ተጠብቆ ይቀመጣል። በጥናቱ ከሚካፈሉ ጥቂት ሰዎች በስተቀር ማንም አያየውም። ጥናቱ ሲጠናቀቅ መጠይቁ ይቃጠላል። ጥናቱ ታትሞ በሚቀርብበት ጊዜም ስምዎት በፍፁም አይጠቀስም።

ጥናቱ ውስጥ እርስዎ የሰጧቸው መረጃዎች ሊጠቀሱ ይችላሉ ነገር ግን ስምዎትም ሆነ ማንነትዎን የሚገልፅ መረጃዎች በጥናቱ ውስጥ አይገለፅም።

ይህ መጠየቅ በፈቃደኝነት የሚሞላ ሲሆን በዚህ መጠይቅ በመካፈልዎ ከሃኪምዎ ጋር ያለዎት ግንኙነት ላይ ምንም የሚፈጥረው ነገር የለም። ስለዚህ ጥናትም ሆነ በጥናቱ በመካፈሉ ሊጠይቁኝ የሚፈልጉት ነገር ካለ ዶክተር እንዳለ ወርቅአለማሁ (0911-235906) ብለው ሊደውሉልኝ ይችላሉ።

ከላይ የተጠቀሱትን ነገሮች በሚገባ መረዳትዎትንና በመጠይቁ ለመካፈል ፈቃደኛ መሆንዎን በፊርማዎ ወይም በቃልዎ ካረጋገጡ ወደ መጠይቁ መሄድ እንችላለን።

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የመረጃ ሠብሳቢ ስም ፊርማ ቀን

Annex 3: English Semi-structured Study Questionnaire and IDI Guide for the quantitative and qualitative part

English: Semi-structured Study Questionnaire for the quantitative part: Study on HIV+ Result Disclosure Status and Reliability among Pre-ART and ART patients in Zewditu Hospital, Addis Ababa

Summary (For the Supervisor during data review)

Pre-ART ☐

ART ☐

Disclosed ☐

Not Disclosed ☐

Part I

No.	Questions to be administered		Skip to
1.1	Age	---------	
1.2	Sex	Male_____Female____	
1.3	Occupation	----------	
1.4	How much money do you earn monthly?	Amount of birr ------- No response……99	
1.5	What is the highest level of school you completed:	READ AND WRITE 1 GRADE 1-4 2 GRADE 5-8 3 GRADE 9-10 PREVIOUS POLICY 4 GRADE 11-12 PREVIOUS POLICY 5 GRADE 9-10 NEW POLICY 6 GRADE 11-12 NEW POLICY 7 ABOVE GRADE 12 8 OTHERS SPECIFY…… 9 NO RESPONSE 99	
1.6	What is your religion?	ORTHODOX 1 CATHOLIC 2 PROTESTANT 3 MUSLIM 4 TRADITIONAL 5 NO RELIGION 6 OTHERS (SPECIFY)_____7 DON'T KNOW 98	

Part II: Marriage and family

No.	Questions to be administered		Skip to
2.1	Have you *ever* been married?	YES 1 NO 2 NO RESPONSE 9	→2.3
2.2	How old were you when you first married? (Probe)	AGE IN YEARS [__|__] DON'T REMEMBER 88	
2.3	What is your Marital Status?	Single Had sex in the last 1 year No sex in the last 1 year Married Had sex in the last 1 year No sex in the last 1 year Divorced/Separated Had sex in the last 1 year No sex in the last 1 year Widowed Had sex in the last 1 year No sex in the last 1 year No response……...99	

Part III: Sexual Behavior

No.	Questions and filters	Coding categories	Skip to
3.1	At what age did you first had sex? (probe)	Age in years [__|__] Have never had sex……00 Don't remember 88 No response 99	→3.8
3.2	Have you had sex in the last 6 months?	Yes……...…1 No ……...…2 Don't know…….....8 No response……9	**3.3** **4.1**
3.4	Did you use condom during the last time you had sex?	Yes ……..…….1 No ……...…2 Don't know… …….....8 No response……9	
3.5	Thinking back to the last time you used a condom, who suggested condom use that time?	Myself……...….……..1 My partner…….……...…2 Joint decision…….……...……3 I don't remember……...……..8	Only ask if person reported using a condom in 3.4

No.	Questions and filters	Coding categories	Skip to
		No response……..……9	
3.6	Thinking back to the last time you used a condom, what was your reason for using one?	I didn't want to put my partner at risk for HIV……1 To prevent pregnancy…….....2 To prevent other STIs…….3 My partner demanded it…….....4 Other…… 5 Don't know……..8 No response…….9	Only ask if person reported using a condom in 3.4
3.7	Thinking back to the last time you had sex without a condom, why didn't you use one? (don't read out) circle the corresponding letter for every answer	Not available…….……A Too expensive…….B Not comfortable initiating……..C Partner objected……..…D In a hurry…….E Embarrassed to buy or ask for …….F Used other contraceptive……...G Didn't think it was necessary……H Didn't think of it……..…I Allergy/ Itching……..J I don't like it……..…K I trust my partner……..L I was drunk……..M Don't trust condoms as they transmit HIV .N Don't know how to use condom……..O Due to frequent breakage of condom……..P It reduces my sexual pleasure……...Q Desire to	Only ask if person reported some-times not using a condom in 3.4

No.	Questions and filters	Coding categories	Skip to
		conceive……..…R My partner and I are both HIV positive……S Other _____ U I don't remember……..V No response …….W	

Part IV: Exposure to HIV prevention messages

No.	Questions and filters	Coding categories	Skip to
4.1	Have you heard any information about ways to prevent the spread of HIV from yourself to another person or re-infect yourself in the last 12-months?	Yes……1 No…….2 Don't know ……..8 No response ……..9	→4.3
4.2	If you received the prevention messages what were the sources?	Yes (1) No (2) NR(9) A. Radio…….. 1……. 2……..9 B. Television…… 1……. 2……..9 C. Posters/billboards..1…2…….9 D. Brochure/leaflet…..1…….2…..9 E. Drama/play...1……. 2……..9 F. Newspaper.… 1……. 2……..9 G. Clinic staff or volunteers 1... 2……9 H. Friends…… 1……. 2……..9 I. HIV/AIDS support group 1……. 2……9 J. Community event…1…. 2…..9 K. Outreach worker.1……. 2…..9 L. Counseling hotline 1…….2……..9 M. Others(specify)_____	
4.3	Have you met with any support group in your community in the past 12 months?	Yes……1 No ……2 Don't know……..8 No response……..……9	
4.4	Has anyone in this clinic counseled/gave a message you about ways to prevent transmitting HIV to others?	Yes ……1 No…….2 Don't know……..8 No response…..……..9	→4.6
4.5	Who counseled/gave a message about preventive methods?	Doctor ……...…1 Nurse……	

No.	Questions and filters	Coding categories	Skip to
		….2 Pharmacist…….3 Peer counselor……4 Don't know…….5 No response……9	
4.6	How long ago did you learn you were HIV+?	<6 months……..……1 6 months- 1 year……2 1-2 years……...…….3 2-3 years……4 >3 years…….5 Don't know…..……..8 No response.……..9	
4.7	Since you know you are HIV+, have you changed your sexual partners? (may choose more than one response)	No…….A Yes, only HIV+……..……..……..B Yes, only one partner……C Yes, fewer partners……...……D Yes, more partners……E Yes, Other_____F Don't know…..……V No response……U	
4.8	Have you changed your use of condoms?	No…….....1 Yes, always use…….....2 Yes, use more frequently……..……3 Yes, use less frequently……4 Yes, never	

No.	Questions and filters	Coding categories	Skip to
		use……...……5 Don't know…..……..8 No response…….9	
4.9	How did you test for HIV	Alone……..….1 With my couple……...…2	Skip to 4.11
4.10	Does your spouse or your sexual partner(s) know that you are HIV+?	Yes ……1 No…..…….2 Don't know ……..8 No response…..……..9	
4.11	If the response to 4.10 is NO, do you intend to inform your HIV+ status?	Yes ……1 No…..…….2 Don't know ……..8 No response…..……..9	
4.12	If yes to 4.11, when do you plan to disclose?	Today…….1 In One Week…….2 In one month…….3 In 6 months…….4 More than 6 month……..5 Don't know……..9	
4.13	If you disclosed that you are HIV + What was the duration between you tested positive and result disclosure?	Please specify ----------	
4.14	Did you have sex with your spouse or sexual partner after you know your HIV status and before you disclosed your result?	Yes……..1 No……2 If yes, With Condom?..... Without condom?.....	
4.15	If you disclosed your HIV+ status, What was the immediate cause to inform your spouse or sexual partner that you are HIV+?	I got suspected……..……..1 I was so disturbed ……...2 The Trust he/she has on me…….3 I was Sick and needed help……4 I was not able to afford the follow up or treatment	

No.	Questions and filters	Coding categories	Skip to
		alone…… ….5 Other (Specify)…….9	
4.16	What was the reason that you tested for HIV?	Voluntary…….1 Pre-marital…… …..2 Sickness……3 To go abroad……4 Advise from a health worker…..…5 Other _____7 Don't know……8 No response……9	
4.17	Does your spouse or sexual partner(s) know her/his HIV status?	Yes ……1 No…..…….2 Don't know ……..8 No response……9	
4.18	If yes, what is her/his HIV status	HIV Positive……..1 HIV negative……..2 Don't know……8 No response……9	
4.19	Is your spouse here today; either came as an attendant or have self appointment for ART follow up?	Yes…….1 No…….2 Don't know……8 No response……9	

Section 5: Opinion/intention to disclosure

No.	Questions and filters	Coding categories	Skip to
5.1	To who you have disclosed your HIV+ status (May mark more than one)	Yes No Spouse or Sexual partner Peer/friend Support groups Family member Health worker	
5.2	*Personal Attitude:* How do you rate your agreement or disagreement about the need to share your/ones HIV+ status to spouse or sexual partners or potential sexual partner?	Strongly agree…1 Agree……..2 Undecided……..3 Disagree……4 Strongly Disagree….5	
5.3	Perceived severity: How do you see the	Very important…..1 Important……2	

No.	Questions and filters	Coding categories	Skip to
	importance of disclosing HIV+ status to spouse or sexual partner (s)?	Moderately important..3 Of little importance….4 Unimportant……..5	
5.4	Perceived severity: What are the perceived negative consequences of disclosing HIV+ result to a spouse or sexual partner (s)? *Don't read response!!!* *May answer more than one.*	Stigma and discrimination……..….1 May result in divorce/break…….2 Discomfort…….3 Children will be disappointed……..4 Fear of discordance…5 Don't know……..9	
5.5	Motivation: What are the perceived factors that enables or enabled you to decide disclose your HIV+ result *Don't read response!!!* *May answer more than one.*	Peer Support…….. ……....1 Keeps it secret……....2 Don't stigmatize…….3 Being Health worker……....4 Someone else HIV+…….5 Mass media/message……6 Other (Specify)……9	
5.6	Perceived Benefits: What are the perceived benefits of disclosing HIV+ status to a spouse or sexual partner? *Don't read response!!!* *May answer more than one.*	Trust…… ….1 Live longer……2 Plan ahead for the family……3 Support each other……..4 Better care ……..5 Avoid unsafe sex……..…6 Other (specify)……..9	
5.7	Subjective Norms: In your community or neighborhood, do HIV+ individuals disclose their HIV+ result disclosure to their spouse or other sexual partners? *Don't read response!!!*	Almost always true…1 Usually true……..2 Often true……..3 Occasionally true……..4 Sometimes but infrequently true……5	

No.	Questions and filters	Coding categories	Skip to
	May answer more than one.	Usually not true……..6 Almost never true……7	
5.8	Subjective Norms: What kind of people you think discloses their HIV+ result to their spouse or sexual partners? *Don't read response!!!* *May answer more than one.*	Educated ……1 Start ART/pre-ART…….2 Married…….3 Unmarried……4 Those with children……..5 Those who are enrolled with PLHA association……6 Other (specify)……..9	

THANK YOU VERY MUCH!!!!

English: IDI Discussion Guide

In-depth interview Discussion Guide for patients who don't disclose their HIV+ result

1) What is your perceived threats/concerns/fear to share your HIV+ result?
2) What was the experience of others in sharing HIV+ result?
3) What are the perceived benefits of disclosing HIV+ result?
4) What do you think will motivate you to disclose your HIV+ result?
5) Do you have any sexual practice/behavior change after you know your HIV+ status?
6) Was there any issue raised by your sexual partner because you practice differently?
7) What do you think non-disclosure will result in?

Annex 4 Amharic: SSI questionnaire and IDI Guide for the quantitative and qualitative part

Summary by Supervisor during Data Review

Pre-ART_____
ART_____
Disclosed_____
Not Disclosed_____

ክፍል 1 (የመልስ ሰጪዎች አጠቃላይ መረጃ)

ተ.ቁ	መጠይቅ	መልስ	ይለፍ
1.1	ዕድሜዎ ስንት ነው	[__|__]	
1.2	የተጠያቂው ፃ	ወንድ_____ሴት____	
1.3	በወር ምን ያህል ገንዘብ ያገኛሉ?	የገንዘብ መጠን(------/------/-------/--------) መልስ የለም ----------99	
1.4	ሥራዎት ምንድነው? (ይገለጽ)	----------	
1.5	ያጠናቀቁት ከፍተኛ የትምህርት ደረጃ ስንት ነው?	ማንበብና መፃፍ 1 ከ1-4 ክፍል 2 ከ 5- 8 ክፍል 3 ከ9-10 በቀድሞው ፖሊሲ 4 ከ11-12 በቀድሞው ፖሊሲ 5 9-10 በአዲሱ ፖሊሲ 6 ከ11-12 በአዲሱ ፖሊሲ 7 ከ12ኛ ክፍል በላይ 8 መልስ የለም 99	
1.6	ሀይማኖትዎ ምንድነው?	ኦርቶዶክስ 1 ካቶሊክ 2 ፕሮቴስ ንት 3 ሙስሊም 4 ባህላዊ 5 ሀይማኖት የለኝም 6 ሌላ(ይገለፅ)---------- 7 አላውቅም 99	

ክፍል 2፤ ስለ ጋብቻና ቤተሰብ

ተ.ቁ	መጠይቅ	መልስ	ይለፍ
2.1	ትዳር ይዘው ያውቃሉ?	አዎ 1 የለም 2 መልስ የለም 99	→2.3
2.2	መጀመሪያ ትዳር ሲይዙ ዕድሜዎ ስንት ነበር(ያውጣጣህ ጠይቅ)	ዕድሜ በአመት (-----/-----) አላስ ውስም 88 መልስ የለም 99	

2.3	አሁን የትዳር ሁኔ ዎ ምን ይመስላል?	አላገባሁም 1 ባለፈው 1 አመት ወሲብ አድርጌአለሁ 1 ባለፈው 1 አመት ወሲብ አላደረኩም 2 በጋብቻ 2 ባለፈው 1 አመት ወሲብ አድርጌአለሁ 1 ባለፈው 1 አመት ወሲብ አላደረኩም 2 ተፋተናል 3 ባለፈው 1 አመት ወሲብ አድርጌአለሁ 1 ባለፈው 1 አመት ወሲብ አላደረኩም 2 ባለቤቴ ሞታል 4 ባለፈው 1 አመት ወሲብ አድርጌአለሁ 1 ባለፈው 1 አመት ወሲብ አላደረኩም 2	
2.4	ርስዎ ባለፉት 12 ወራት ውስጥ ከሴላ ሰዉ ጋር የወሲብ ግንኙነት የፈጸሙበተ አጋጣሚ አለ?	አዎ 1 የለም 2 አላውቅም 88 መልስ የለም 99	

ክፍል 3፤ የግብረ ሥጋ ግንኙነት ባህሪ

ተ.ቁ	መጠይቅ	መልስ	ይለፍ
3.1	ለመጀመሪያ ጊዜ የግብረ ስጋ ግንኙነት ሲፈፅሙ ዕድሜዎ ስንት ነበር (ያውጣጣህ ጠይቅ)	ዕድሜ በአመት (-------/--------) ግብረ ስጋ ግንኙነት ፈፅሜአላውቅም..00 አላስ ውስም.....98 መልስ የለም.....99	→4.1
3.2	ባለፉት 6 ወራት ውስጥ ግብረ ሥጋ ግንኙነት ፈፅመው ያውቃሉ?	አዎ 1 የለም 2 አላስ ውስም 8 መልስ የለም 99	→3.3 →4.1
3.3	ለመጨረሻ ጊዜ ግብረስጋ ሲያደርጉ ኮንዶም ተጠቅመው ነበር?	አዎ.. 1 የለም ... 2 አላስ ውስም 8 መልስ የለም 99	
3.4	ኮንዶም ተጠቅምው ከሆነ ለመጠቀም ሀሳቡን ያመጣው ማነው?	ኔ..... 1 ሱ(ርሷ).....2 ሁለ ችንም.....3 አላስ ውስም..... 88 መልስ የለም..... 99	ስጥያቄ 3.3አዎ ብለው የመለሱትን በቻ ጠይቅ
3.5	ለመጨረሻ ጊዜ ግብረ ስጋ ሲያደርጉ ኮንዶም የተጠቀሙበት ምክንያት ምንድነው?	ወደ የግብረ ሥጋ ንደኛዉ ኤች አይ ቪ ንዳይተላለፍ..1 ርግዝናን ለመከላከል 2 ሴሎች የአባላዘር በሽ ለመከላከል 3 ሱ/ ርሷ ስላልፈለገ/ስላልፈለገች 4 ሴላ 5	ስጥያቄ 3.3አዎ ብለው የመለሱትን ብቻ ጠይቅ

		አላውቅም 88 መልስ የለም 99		
3.6	ስመጨረሻ ጊዜ የግብረ ሥጋ ግንኙነት ሲፈፅሙ ኮንዶም ካልተጠቀሙ ምክንያቱ ምንድነው? (ምርጫውን አያንቡ) ስተጠቀሱት መልሶች ሁሉ በአኳያው ያለውን ፊደል አክብቡ)	ስለማይገኝ (ስላልነበረ) ውድ ስለሆነ ንጠቀም ማለት ስላሳፈረኝ/ስላልደፈርኩ ጓደኛዬ ስለተቃወመ/ች በችኮላ/ስለተጣደፍን ረስተን ስመግዛት/ስመጠየቅ ስላፈርኩ ሴላ የወሲድ መቆጣጠሪያ ስለተጠቀምን አስፈላጊ መስሎ ስላል ዮኝ አላሰብኩበትም ነበር አስርጂ/ማሳከክ ስለሚያመጣብኝ ስለማልወድ ጓደኛዬን ስለማምናት/ስለማምነው አልኮል ጠጥቼ ስለነበር ኮንዶም ኤች አይ ቪ ያስተላልፋል ብዬ ስለማምን ኮንዶም አጠቃቀም ስለማላውቅ ኮንዶም በየጊዜው የተቀደደ ስላስተገረኝ ርካ ን ስለሚቀንስብኝ ልጅ መውለድ ስለምፈልግ ተመርምረን ኤች አይ ቪ ንዳለብን ስላረጋገጥን ሴላ---------- አላስ ውስም መልስ የለም	A B C D E F G H I J K L M N O P Q R S T U V	ስጥያቄ 3.3አይ ብለው የመለሱትን ብቻ ጠይቅ?

ክፍል 4፤ ስለ ኤች.አይ.ቪ መከላለያ መረጃዎች

ተ.ቁ	መጠይቅ	መልስ	ይለፍ
4.1	ባለፉት 12 ወራት ርስዎ HIV ወደ ሊላ ሰው እንዳያስተላልፉ ያገኙት መረጃ አለ?	አዎ 1 የለም 2 አላውቅም 98 መልስ የለም 99	
4.2	አርስዎ ኤች አይ ቪ ንዳያስተላልፉ የሚረዱ መከላከያ መንገዶች መረጃ ካገኙ መረጃውን ከየት ነበር ያገኙት?	አዎ (1) አይ(2) መልሱ የለም(9) ከሬዲዬ…….. 1……. 2……..9 ከቴሌቭዥን…… 1……. 2……..9 ከማስ ወቂያ ሰሌዳ..1…2…….9 ከበራሪ ወረቀት…..1…….2…..9 ከድራማ...1……. 2……..9 ከጋዜጣ…. 1……. 2……..9 ከጤና ባለሙያ 1... 2……9 ከጓደኛ…… 1……. 2……..9 ከ ኤች አይ ቪ ኤድስ ላይ ከሚሠራ ድረጅት 1……. 2……9 ከስብሰባ…1…. 2…..9 ከማህበረሰብ ሠራተኛ .1……. 2…..9	

		በስልክ 1…….2……..9 ሌላ (ይገለፅ)_____	
4.3	ባለፉት 12 ወራት ውስጥ በአካባቢዎ በኤች አይ ቪ የተያዙ ሰዎችን የሚረዳ ቡድን (ድርጅት) ጋር ተገናኝተው ነበር?	አዎ 1 የለም 2 አላውቅም 98 መልስ የለም 99	
4.4	በዚህ ክሊኒክ ውስጥ ከሚሰራ ሰው ኤች አይ ቪ ወደ ልላ ሰው ንዳያስተላልፌ ምክርና መረጃ አግኝተው ያውቃሉ?	አዎ 1 የለም 2 አላውቅም 98 መልስ የለም 99	→4.10
4.5	መረጃውን የሰጠዎት ግለሰብ የስራ ድርሻ ምንድን ነው?	ሀኪም የጤና በለሙያ 1 ነርስ 2 ፋርማሲስት 3 አቻ አስተማሪ 4 አላውቅም 5 መልስ የለም 9	
4.6	ኤች አይ ቪ ፖዘቲቭ ንዳሆኑ ካወቁ ስንት ጊዜ ሆነዎት?	ከ6 ወር በ ች 1 ከ6 ወር - 1 ዓመት 2 1-2 አመት 3 2-3 አመት 4 ከ3 አመት በላይ 5 አላውቅም 8 መልስ የለም 9	
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4.11	ለጥያቄ 4.10 መልሰዎ የለም ከሆነ	አዎ 1	

	ኤች አይ ቪ ፖዞቲቭ ንደሆኑ ስማሳወቅ ቅድ አስዎት?	የለም 2 አሳውቅም 8 መልስ የለም9	
4.12	ስፕያቄ 4.11 መልሰዎ አዎ ከሆነ መቼ ስማሳወቅ አቅደዋል	ዛሬ ..1 በአንድ ሳምንት ውስፕ..2 በአንድ ወር ውስፕ..3 በ6 ወር ውስፕ..4 ከ6 ወር በኋላ..5 አሳውቅም 9	
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4.14	ከባለቤትዎ ወይም የግብረ ስጋ ንደኛ ዎ ጋር ኤች አይ ቪ ፖዞቲቭ መሆንዎን ያወቁ ውጤትዎን ሳይናግሩ የግብረ ስጋ ግንኙነት ያደረጉበት አጋጣሚ ነበር?	አዎ 1 የለም 2 አዎ ብለው ከመለሱ ኮንዶም ተጠቅመዋል?---------- ኮንዶም አልተጠቀሙም?----------	
4.15	ኤች አይ ቪ ፖዞቲቭ መሆንዎን ካሳወቁ ያሳወቁበት ምክንያት ምንድን ነው?	ስለተጠረጠርኩኝ..1 ስለተረበሸኩኝ..2 ምነኝ/ያምነኝ ስለነበር..3 አሞኝ ስለነበር ..4 የህክምናውን ወጪ ብቻየን ስለማልችለው..5 ሌላ(ይገለጽ)----------	
4.16	ኤች አይ ቪ የተመረመሩበት ምክንያት ምንደነው?	በራሴ ተነሳሽነት ተመረመርኩ 1 ስማግባት ስለፈለኩ 2 ስላመመኝ 3 ውጭ ሀገር ስመሄድ..4 የጤና ባለሙያ መክሮኝ..5 ሌላ _____ 7 አሳውቅም 8 መልስ የለም 9	
4.17	የባለቤትዎን ወይም የግብረ ስጋ ንደኛዎን የኤች አይ ቪ ውጤት ያውቃሉ?	አዎ 1 የለም 2 አሳውቅም 8 መልስ የለም9	
4.18	የሚያዉቁ ከሆነ ውጤ ችው ምንድነው?	ኤች አይ ቪ ፖዞቲቭ 1 ኤች አይ ቪ ኔጌቲቭ 2 አሳውቅም 8 መልስ የለም 9	
4.19	ባሁኑ ሰዓት ባለቤትዎ ዚህ ናቸው? (ሠው ሲያስ ምሙም ሆነ ስራሳቸው ጉዳይ)	አዎ 1 የለም2 አሳውቅም 8 መልስ የለም9	

ክፍል5፤ ውጤትን ስለማሳወቅ

ተ.ቁ	መጠይቅ	መልስ	ይለፍ
5.1	ኤች አይ ቪ ፖዞቲቭ መሆንዎን ያሳወቁት ለማን ነዉ? (ያሳወቁት ሁሉ ይከበብ)	አዎ የለም ባለቤትዎ 1 2 የግብረ ሥጋ ጓደኛዎ 1 2 ጓደኛዎ/ወዳጅዎ 1 2 ድጋፍ የሚሰጡ ክፍሎች 1 2 የቤተሰብ አባል 1 2 የጤና ባለሙያ 1 2	
5.2	አንድ ኤች አይ ቪ ፖዘቲቭ የሆነ ሰው ውጤቱን ለባለቤቱ ወይም ለግብረ ስጋ ጓደኛው ስለማሳወቅ ምን አስተያየት አለዎት	በጣም ስማማለሁ 1 ስማማለሁ 2 አስተያየት የለኝም 3 አልስማማም 4 በፍፁም አልስማማም 5	
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5.4	ኤች አይ ቪ ፖዞቲቭ መሆንዎን ጓዲያሳዉቁ ያደፋፈረዎት ወይም ወደፊት ጓዲያሳዉቁ የሚያደርግዎት ምክንያቶች ምንድን ናቸዉ? መልሱ አይነበብ ከአንድ በላይ መልስ ከሰጡ ይከበብ	የጓደኛ ድጋፍ..1 ሚስጥሬ መጠበቁ..2 አለመገለሌ..3 የጤና ባለሙያ መሆኔ..4 ሌላኤች አይ ቪ ፖዘቲቭ የሆነ ሰውማወቁ..5 ከማስሚዲያ ያገኘሁት መረጃ..6 ሌላ(ይገለጽ)----------	
5.5	ኤች አይ ቪ ፖዞቲቭ መሆንዎን ለባለቤትዎ ወይም የግብረ ሥጋ ጓደኛዎ ማሳወቅዎ ምን ጥቅም ያስገኛል ብለው ያስባሉ? መልሱ አይነበብ ከአንድ በላይ መልስ ከሰጡ ይከበብ	መተማመን..1 ረጅም ድሜ መኖር ያስችላል..2 ለቤተሰብ አቅድ ማዉጣት ያስችላል..3 ርስ በርስ ለመደጋገፍ ይረዳል..4 ለተሻለ ጓክብጓቤ..5 ጥንቃቄ የጎደለው የግብረ ሥጋ ግንኙነት ለማስወገድ..6	

		ሌላ(ይገለጽ)----------	
5.6	በአካባቢዎ ኤች አይ ቪ ፖዞቲቭ የሆኑ ግለሰቦች ውጤ ችውን ለባለቤ ችው ወይም ለግብረ ሥጋ ጓደኛችው ይገልፁሉ ለሚለው ሀሳብ የ ርሶ አስተያየት ምንድነው?	ሁል ጊዜ ውነት ነው 1 ብዙ ጊዜ ውነት ነው 2 አልፎ አልፎ ውነት ነው 3 አንዳንድ ጊዜ ውነት ነው..4 አንዳንድ ጊዜ ግን ከስንት አንዴ ውነት ነው..5 ብዙ ጊዜ ውሸት ነው 6 በፍፁም አይገልፁም 7	
5.7	ኤች አይ ቪ ፖዞቲቭ ውጤ ችውን ለባለቤ ችው ወይም ለግብረ ሥጋ ጓደኛችው የሚገልጹት ምን አይነት ሰዎች ይመስልዎ ል? መልሱ አይነበብ ከአንድ በላይ መልስ ከሰጡ ይከበብ	የተማረ..1 ART የጀመረ/ pre-ART..2 ያገቡ..3 ያላገቡ..4 የወለዱ..5 በኤች አይ ቪ ማህበራት የ ቀፉ..6 ሌላ(ይገለጽ)----------9	

መጠይቁን ጨርሻለሁ ጊዜዎን ሰውተው ላደረጉልኝ ትብብር ድግ አመሠግናለሁ

Amharic: In-depth interview Discussion Guide for patients who don't disclose their HIV+ result to their spouse or sexual partner

1. ኤች አይ ቪ ፖዞቲቭ መሆንን ማሳወቅ ምን ችግር ደፈጥራል?
2. ኤች አይ ቪ ፖዞቲቭ መሆንዎን ንዲያሳዉቁ ያደፋፈረዎት ወይም ወደፊት ንዲያሳዉቁ የሚያደርግዎት ምክንያቶች ምንድን ናቸዉ?
3. በአካባቢዎ ኤች አይ ቪ ፖዞቲቭ የሆኑ ግለሰቦች ውጤ ችውን ለባለቤ ችው ወይም ለግብረ ሥጋ ጓደኛችው ሲገልጹ ያለው ልምድ ምን ይመስላል?
4. ኤች አይ ቪ ፖዞቲቭ መሆንዎን ለባለቤትዎ ወይም የግብረ ሥጋ ጓደኛዎ ማሳወቅዎ ምን ጥቅም ያስገኛል ብለው ያስባሉ?
5. ኤች አይ ቪ ፖዞቲቭ መሆንዎን ከወቁ በሁዋላ የቀየሩት የወሲብ ባህርየ አለ? ቢገልጹልን?
6. ከላየ በገለጹልን የተከሰተ ግር ነበር?
7. ኤች አይ ቪ ፖዞቲቭ መሆንዎን ለባለቤትዎ ወይም የግብረ ሥጋ ጓደኛዎ አለማሳወቅ ምን ምን ጉዳት አለው?